UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JAN - 9 2018

COPY

John A. Leschinski
Principal Engineer
MTA NYCT, Capital Program Management
2 Broadway, 2nd Floor
New York, NY 10004

Re: Request for Dry Removal of Asbestos-Containing Material (ACM) in Manholes at MTA/NYC Transit Facilities

Dear Mr. Leschinski:

The U.S. Environmental Protection Agency (EPA) has reviewed the variance request submitted by the MTA/NYC Transit Authority, dated December 11, 2017 for the above-referenced project. Pursuant to 40 C.F.R. Part 61.145, EPA hereby authorizes the dry removal of ACM in manholes with live electrical systems equipment that belong to the MTA/NYC Transit Authority as indicated in the enclosure, with the following conditions:

1. EPA shall receive proper notification as provided by 40 C.F.R. Part 61.145(b). The notification shall indicate that the removal will be performed without the use of water, and reference shall be made to this variance.

2. A separate notification is required for routine maintenance operations that involve the removal of threshold amounts of regulated asbestos-containing materials (RACM). The notification must be submitted according to 40 C.F.R. Part 61.145(b).

3. The EPA has determined that the work practices outlined in the December 11, 2017 request are acceptable alternatives to wetting in controlling asbestos emissions. The work practices in the submittal are included as an enclosure as conditions of this authorization.

4. A copy of this variance with its enclosure must be posted at all work areas during abatement activities.

5. This variance shall remain effective until December 31, 2019.

If you have any questions, please contact Victor Tu, of my staff, at (212) 637-3476.

Sincerely,

Dore LaPosta, Director
Division of Enforcement & Compliance Assistance

Enclosure

cc: John F. Eget
Associate
LiRo Engineering, Inc.
Three Aerial Way
Syosset NY 11791

LiRo Engineers, Inc.
A LiRo Group Company
100 Duffy Avenue, Suite 402, Hicksville, NY 11801 Telephone 516.595.2900 Facsimile 516.681.0589 www.liro.com

Via Overnight Mail Services

December 11, 2017

Mr. Dore LaPosta, Director
United States Environmental Protection Agency, Region 2
Division of Enforcement and Compliance Assistance
290 Broadway
New York, New York 10007-1866

RE: Request for Dry Removal of Asbestos -Containing Materials in Manholes at MTA / New York City Transit Facilities

Dear Mr. LaPosta:

On behalf of the MTA/New York City Transit (NYCT), LiRo Engineers, Inc. is petitioning for approval to conduct dry removal of asbestos-containing materials (ACM) associated with live electrical system equipment in manholes throughout the Transit system. The need to conduct dry removal is inherent and unique to NYCT and the diverse environment in which abatement projects occur. This request is made due to system specific conditions which cause practical difficulties and associated hardships in complying with the full provisions of New York State Industrial Code Rule 56 (amended and effective March 21, 2007) and Title 40 of the Code of Federal Regulations (40 CFR Section 61.145).

Through a network of power substations, electrical current is supplied to the track third rail to power the trains; cables inside utility ducts and/or manholes, tunnel lighting conduits, electrical station lighting panels, low-voltage signal feeder cables, wiring for public-address systems and emergency communications, power distribution cables, and other system components remain energized as directed by system operation service requirements and safety concerns.

Due to the hardships presented by these factors associated with conducting asbestos abatement in strict accordance with regulatory provisions, categorical relief is requested from the United States Environmental Protection Agency (EPA) dry removal restrictions and requirements for the securing of electrical systems in the abatement areas:

Citation 1: "Shut down and lock-out of electric power to all work areas. The contractor shall provide temporary power and lighting to ensure safe installation of temporary power sources and equipment used where high humidity and/or water shall be sprayed in accordance with all applicable codes. All power to work areas shall be brought in from outside the area through a ground fault interrupter at the source."

Citation 2: "No dry removal of asbestos containing materials shall be permitted."

To maintain adequate restrictions on abatement contractors and concurrent construction activities, and to facilitate oversight of abatement of any particular project, contractors performing dry removal of ACM will be directed and monitored to conduct abatement in accordance with a strict sequence of work procedures that are specific for each of the three (3) types of manholes found throughout the NYCT system; these

procedures are provided in the attachment to this correspondence and is titled: Enclosure - Procedures for the Dry Removal Abatement of ACM in Manholes.

Since 2001, NYCT has petitioned and received from EPA multiple dry removal variances for this specific NYCT work and the current variance is scheduled to expire on February 28, 2018. It would be beneficial to NYCT if the renewed variance were to be in effect for a two (2) year term concurrent with the applicable blanket variance for this work issued by the New York State Department of Labor.

Please contact our office as soon as possible in the event that amendments or clarifications are required. Thank you for your prompt attention to this matter.

Sincerely,

LiRo Engineers, Inc.

John F. Eget
Associate

JFE: USEPA Dry Removal Request for NYCT Manholes 12-11-2017

Enclosure: Procedures for the Dry Removal of ACM in Manholes

Copy To: John Leschinski, P.E (Via E-Mail)
Principal Engineer, MTA NYCT

Received
DEC 1 3 2017

LiRo Engineers, Inc.
A LiRo Group Company

PROCEDURES FOR THE DRY REMOVAL OF ACM IN MANHOLES

Due to the hardships presented by the de-energizing of electrical systems within manhole work areas, categorical relief is requested from United States Environmental Protection Agency (EPA) dry removal restrictions and requirements for the securing of electrical systems in the abatement areas:

Citation 1: "Shut down and lock-out of electric power to all work areas. The contractor shall provide temporary power and lighting to ensure safe installation of temporary power sources and equipment used where high humidity and/or water shall be sprayed in accordance with all applicable codes. All power to work areas shall be brought in from outside the area through a ground fault interrupter at the source."

In lieu of complying with this provision, an exemption is requested that is consistent with the allowances described in subsection 7.7 of Part 56 of Title 12 of the Official Compilation of Codes, Rules, and Regulations for the State of New York (12 NYCRR Part 56) whereby electrical systems in or passing through a regulated asbestos abatement work area may stay in operation provided that:

1. All unprotected cables (except low voltage [less than 24 volts],communication and control system cables), panel boxes of cables, and joints in live conduit that run through the regulated work area shall be covered with 3 independent layers of 6 mil fire retardant plastic sheeting with each layer individually duct taped and sealed, and left in place until satisfactory clearance air sampling results are obtained;

2. any energized circuits remaining in a regulated work area are posted with a minimum 2 inch high lettering warning sign that reads: DANGER LIVE ELECTRICAL – KEEP CLEAR

Citation 2: "No dry removal of asbestos containing materials shall be permitted."

In lieu of complying with this provision, and other corresponding provisions pertaining to the use of amended water, post-stripping wetting, and removal wetting requirements, an exemption is requested that permits the use of water as a cleaning agent or dust control measure as prescribed by the project site safety and health officer, in and around regulated work areas having activated electrical equipment. Simultaneous relief will be obtained from the aforementioned 12NYCRR Part 56 on a project-by-project basis as it pertains to dry removal and "adequate wetting" as it is referred to therein in subsections 56-2.1(e), 56-8.4(b), and 56-8.4(c).

Dry removal abatement will be conducted as follows:

1. Background air samples will not be collected; all work areas will be cleared to the more stringent criteria of less than 0.01 fibers per cubic centimeter.

2. Clearance air monitoring of the work area will be conducted in accordance with the following modifications:

    a) Air samples will be collected inside the regulated abatement work area during asbestos abatement activities until final visual inspection is acceptable. The minimum number of samples collected inside of each individual work area shall be based on the amount of material in the work area. Five (5) air samples for large work areas, three (3) air samples for small work areas and one (1) air sample shall be collected inside of each minor work area.

PROCEDURES FOR THE DRY REMOVAL OF ACM IN MANHOLES – CONTINUED

The number of air samples collected outside the work area shall be based on the amount of material to be removed for that particular work area. Five (5) air samples for large work areas, three (3) air samples for small work areas and one (1) air sample shall be collected inside of each minor work area. Common outside the work area air sample(s) shall be collected if a single remote/mobile decontamination unit is utilized for simultaneous abatement of several adjacent regulated work areas.

b) The results of the last set of air samples collected during asbestos abatement, including final cleaning and lockdown encapsulation of non-removal surfaces covered with fire-retardant plastic sheeting, will also be used as the clearance air sample criteria.

c) Upon satisfactory visual inspection and provided the airborne fiber concentrations are below 0.01 fibers per cubic centimeter (f/cc), the regulated work area can be dismantled.

d) If results of the last set of inside regulated work area air samples are equal to or greater than 0.01 f/cc, the contractor will continue cleaning of the regulated work area using wet methods with negative air pressure equipment operating. Air samples will be collected inside and outside the regulated abatement work area during the re-cleaning activities and used as the clearance air sampling criteria.

e) If results of the last set of outside regulated work area air samples are equal to or greater than 0.01 f/cc, the contractor will clean-up the surfaces outside the regulated work area using HEPA-vacuums and wet methods. Air samples will be collected outside the regulated abatement work area during the clean-up activities and used as the clearance air sampling criteria.

3. A mobile decontamination system will be used if the site conditions do not allow an attached/remote decontamination system. The mobile decontamination system will be located as close to the work area as possible (examples include but are not limited to entrance(s) to Bus Depots, Subway Stations, etc.). The Decontamination System will be cordoned off with asbestos warning tape and signs. Prior to removal from the job site at the end of each shift, the mobile system will be HEPA-vacuumed, wet wiped completely and sealed. The remote and/or mobile decontamination system's shower may be used as an equipment decontamination washroom. Equipment shall be decontaminated only during times when the shower(s) are not being used by personnel.

4. The location of the washroom as required by will be determined by the following site conditions.

a) If the work area configuration does not allow the washroom to be constructed inside the regulated work area, the washroom will be constructed outside the regulated work area entrance and attached to the existing airlock (changing chamber) used to access the regulated abatement work area.

b) If a remote airlock (changing chamber) is utilized based on site conditions, the washroom chamber will not be constructed. A waste wash-area will be established inside the work area by placing fire-retardant plastic sheeting on the floor within close proximity to the

PROCEDURES FOR THE DRY REMOVAL OF ACM IN MANHOLES – CONTINUED

work area's exit. All waste bags will be wet wiped, HEPA-vacuumed and doubled bagged and or be containerized in the wash-area prior to the waste being transferred to the waste container on site. No ACM abatement or cleaning may occur during waste transfer operations.

c) If a waste container is not on-site prior to the waste transfer, a waste holding shall be constructed. The holding area is to temporarily store the bagged or containerized waste until the waste can be transferred to a waste transport vehicle.

d) The remote airlock (changing chamber) will be cordoned off with asbestos warning tape and signs.

5. A remote airlock (changing chamber) may be utilized where it is not logistically possible to attach it to the work area (examples include but are not limited to the catwalk space and safety restrictions, active track (third rail and right of way) adjacent to the work area entrance, etc.). It will be positioned in close proximity to the regulated work area (such as but not limited to the closest station platform entrance, inactive section of work site, etc.). Curtained doorway with three layers of overlapping poly will be utilized at the entrance to the each work area. The remote airlock (changing chamber) will be cordoned off with asbestos warning tape and signs. Workers will HEPA-vacuum and wet wipe themselves in the work area prior to moving towards the remote airlock (changing chamber).

6. The walkway from the regulated abatement work area to the remote/mobile decontamination unit or next regulated abatement work area will be cordoned off or restricted by certified asbestos workers during use.

7. The work area will be sealed during non-working hours. Prior to sealing of the work area all surfaces will be wet wiped and/or HEPA-vacuumed and the negative air unit(s) shall continue to operate for an additional 20-30 minutes post disturbance activities. Upon restarting of the negative air unit(s) the contractor will ensure that all barriers remain intact and secure, prior to the continuation of abatement activities. Inspection, necessary repairs and documenting will be performed during negative air unit(s) operation.

8. Negative air units will be exhausted outside the work area into a non-public/normally unoccupied area (no box required). If a non-public/normally unoccupied area is not available, the negative air units will be exhausted into a plywood box a minimum of 1-foot x 1-foot x 1-foot with a pre-filter covering the exhaust end into a public/occupied area. The exhaust box will be cordoned off with a tape barrier. An air sample of the negative air exhaust shall be collected in these area(s) and outside of the box.

9. Localized engineering controls (HEPA-vacuum) will be utilized during the abatement in "Reach-in Access Manhole(s)". The suction end of a HEPA-vacuum hose shall be placed inside the manhole access. The HEPA-vacuum shall run while the matrix of the ACM is being disturbed.

10. All debris in the manhole(s) shall be removed during the pre-cleaning phase and disposed of as asbestos contaminated waste. All asbestos contaminated debris collected from within the work area will be thoroughly wetted once inside the waste bag and maintained wet through

PROCEDURES FOR THE DRY REMOVAL OF ACM IN MANHOLES – CONTINUED

decontamination; after decontamination, waste bags will be accumulated in designated waste containers until transport from the site by an asbestos licensed transporter.

11. Preparation requirements:

    a) All Manhole(s)

        i) After all debris clean-up is complete, one (1) layer of 6-mil fire retardant plastic sheeting will be secured to the manhole floor.

        ii) The manhole(s) entrances will be sealed between work shifts with a minimum of two (2) layer of 6-mil fire retardant plastic sheeting posted with appropriate signage. For Street/Platform Access Manhole(s), first, the opening will be sealed, followed by the replacement of the manhole cover(s).

    b) Reach-in Access Manhole(s):

        i) Critical barriers will consist of filling holes, cracks or inlets with foam or caulking.

        ii) Each work area will be cordoned off with asbestos warning tape and signs at a minimum of three-feet from each side and in front of the manhole opening. One layer of plastic sheeting will be extended three feet onto the track from the working side of the manhole's opening.

12. For all manholes, a one (1) hour pre-abatement waiting period and settling/drying time for large projects/work areas and a thirty (30) minute pre-abatement period settling/drying time for small projects/work areas will be observed.

13. For all manholes, all friable ACM (cementitious and non-cementitious cable insulation and cementitious duct seal) and non-ACM that are interconnected will be abated using glovebag procedures. Bagged ACM waste will be thoroughly wetted and maintained wet through decontamination; after decontamination, waste bags will be accumulated in designated waste containers until transport from the site by an asbestos licensed transporter

14. Non-friable ACM (transite panels, duct sleeve, duct seals, wall and/or friable ACM in non-ACM containers, etc.) will be removed intact from the substrate and wrapped in two (2) layers of 6-mil fire retardant plastic sheeting.

15. One stage of cleaning of all areas abated will be performed at the conclusion of abatement activities. Additionally, floor plastic sheeting and isolation barriers will also be cleaned if applicable. After the post-abatement cleaning is complete a visual inspection by the project monitor and contractor supervisor shall be performed to confirm that the scope of abatement work is complete, and the area is dry and free of visible debris/residue. If re-cleaning is required, an additional visual inspection shall be performed. Additional air samples will be collected during all re-cleaning activities and will be utilized as the clearance air sample criteria. Waiting/settling and drying times will be applicable.

PROCEDURES FOR THE DRY REMOVAL OF ACM IN MANHOLES – CONTINUED

16. A distance of approximately ten (10) feet will be maintained to restrict the general public from the cordoned off work area during the actual removal of ACM, except in those areas/locations where it is logistically impossible (examples include but are not limited to: adjacent tracks where there is active train traffic or locations where non-certified individuals are required to enter the ten (10) foot perimeter to gain access to or perform their job tasks, i.e. train/crane operators, track workers, etc.).